



# JoiMint Update



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# Basic Ideas for JoiMint

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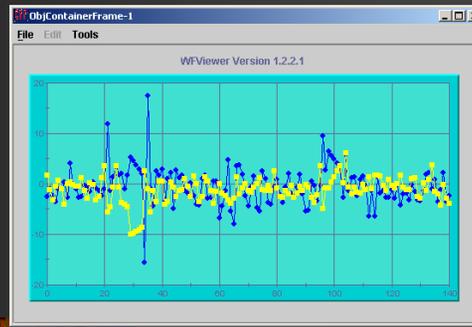
## Java based Operator Interface

- More than a display tool
- Make use of Java to integrate tools rather than only accessing your controls data

## Run as a Management Integration Tool

- Integrate log book
- Integrate Mail and RDB access

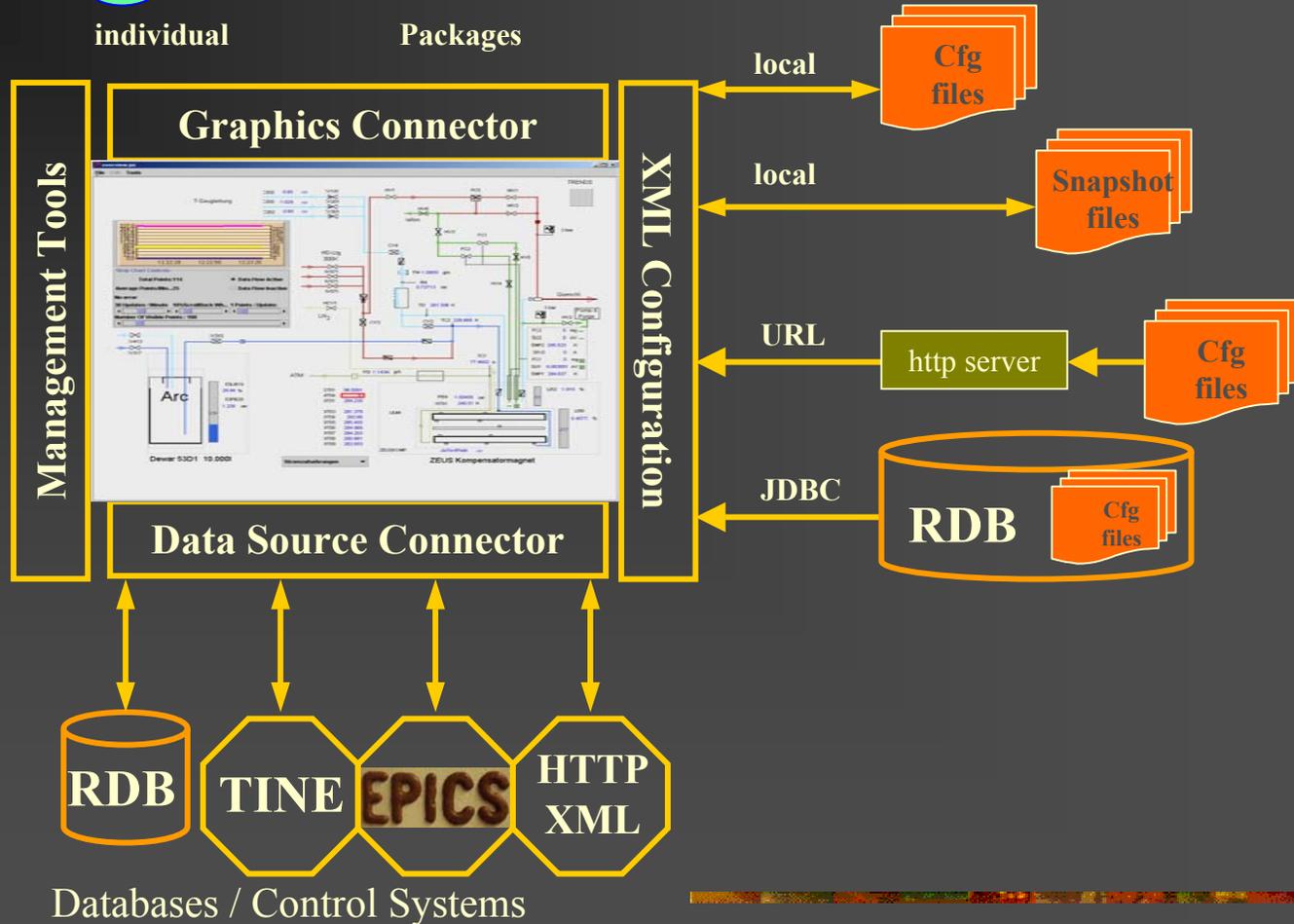
# Basics



individual

Packages

- Operator Log
- Mail
- VDCT
- .
- .



# Control System Access

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## Data Access

- Poll data with individual scan times (0.1, 0.2, 0.5, 1, 2, 5, 10 [sec])
- Monitor data whenever control system supports it

## Name Space Access

- Built in Name Space Browser

# Name Space Browser

## TINE (DESY)

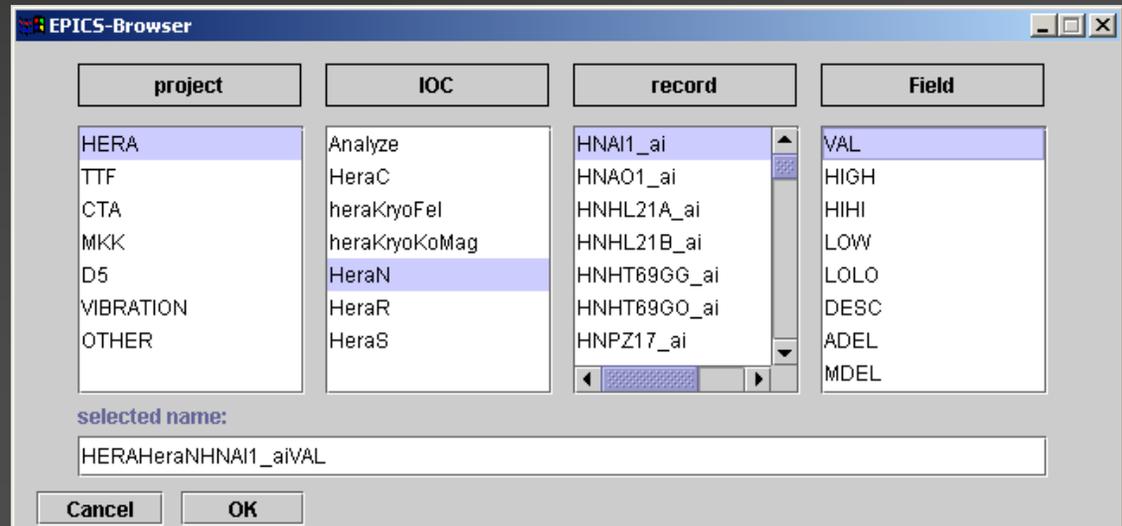
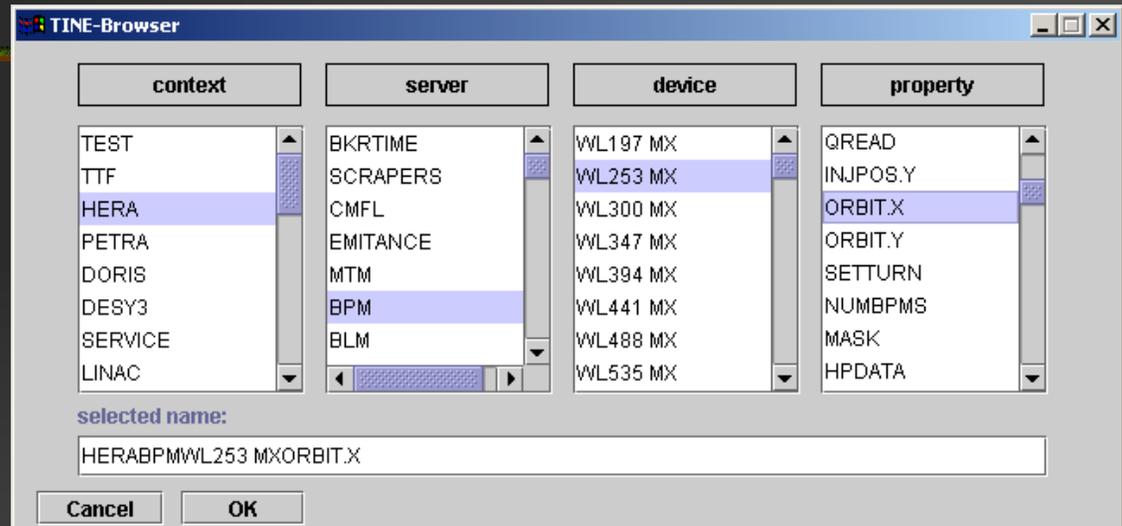
- Query(1) Name server
- Query(2) Server

## EPICS (DESY)

- Query(1/2) File

Query on IOC is missing

- What about an LDAP server on each IOC?
- And/ or query RDB where databases are defined?



# Graphic Objects (new) I

## Container

- Container
- Image

## Controls

- Button
- Slider
- Text
- Text Area (List of text entries)
- Calculation
- Related Display

# Graphic Objects (new) II

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## Chart

- Strip Chart
- Scroll Time (archive data)
- Wave Form
- Correlation Plot

## Shapes

- Line, horiz. Line, vert. Line
- Circle, Ellipse
- Rectangle
- Polygon

# Graphic Objects (new) III

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## Monitors

- Meter
- Bar graph

## under test:

- Comparator ( used for color rules etc..)
- Toggle button

# Configuration

All configuration data in XML format

Read cfg. files from:

- Local disk
- Oracle (special feature for records defined in Oracle)
- URL (use Java URL -stream)

Save/ restore snapshot files

- Save configuration and data
  - To disk
  - As attachment of operator log message
  - As mail attachment

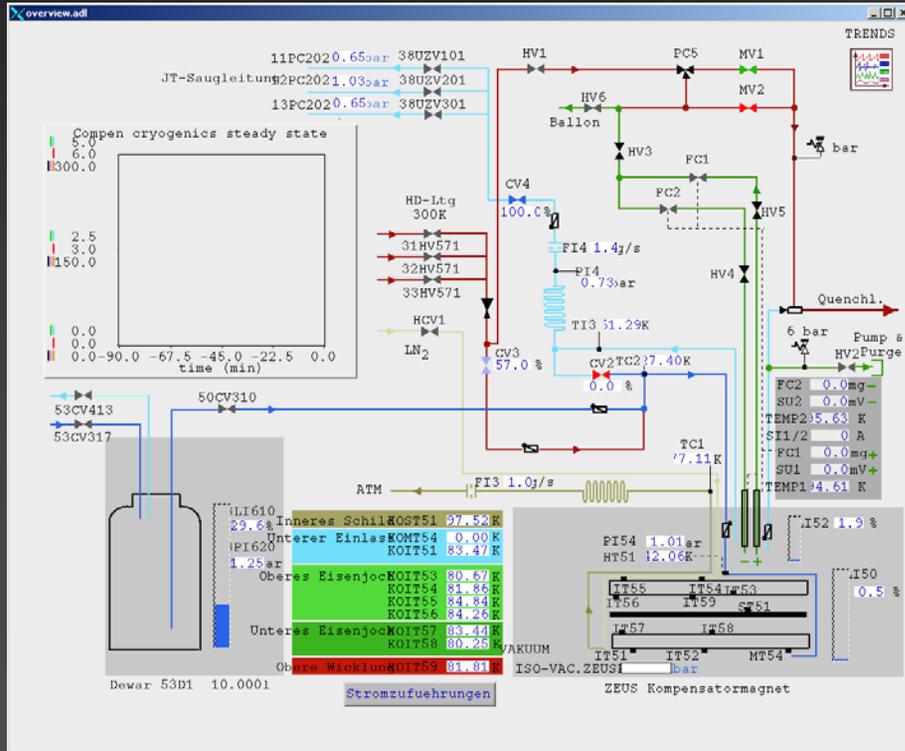
Save/ restore projects ( window sets with their location)

adl2xml

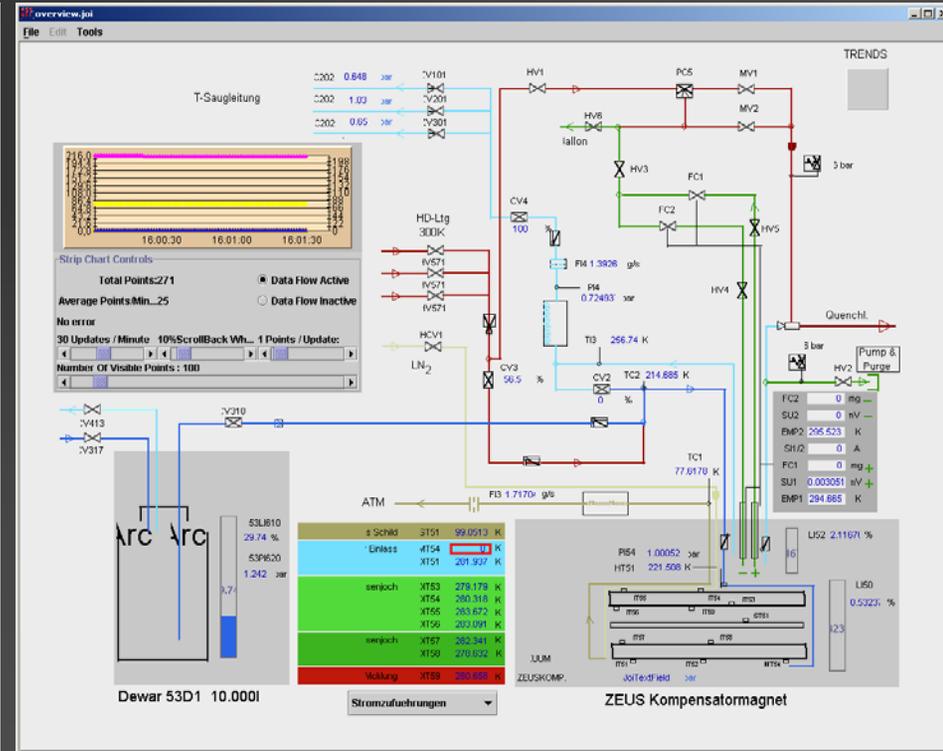
- Conversion of adl files (dm2k-graphics) into xml files (JoiMint graphics)

# Converted graphics

## dm2k



## JoiMint



# Management Tools

## Mail

The Mailer 0.2 dialog box is used for sending emails. It features a title bar with the text "Mailer 0.2" and a close button. The main area contains several input fields: "To:" with the value "dmitrov@mail.desy.de", "CC:" with "Matthias.Clausen@desy.de", "From:" with "Matthias.Clausen@desy.de", and an empty "Subject:" field. Below these fields is a large text area containing the placeholder text "Your text here" and a pre-filled message: "This mail has been sent from JoiMint Version 1.2.2.13". At the bottom of the dialog are two buttons: "Send" and "Cancel".

## Operator Log

The Operator Log 0.1 dialog box is used for logging operator actions. It has a title bar with "Operator Log 0.1" and a close button. The "Operator:" section includes a "Name:" dropdown menu set to "Clausen" and a "Group:" text field with "MKS-2". The "Message:" section contains an "ID:" field with "MKS-2:021711-18:00:33" and a "Subject:" field with "example log message". A text area below shows a sample log message: "This message was generated to show the functionality of in JoiMint integrated operator log messages. The actual open JoiMint window will be copied to the ORC database". The "Keywords:" section includes dropdown menus for "Software:" (JoiMint), "Hardware:" (empty), "Project:" (HERA-Kryo), and "Device:" (Applikationen), along with a "Location:" text field. At the bottom are "OK" and "Cancel" buttons.

# Diagnostic Tools: EPICS property table

Field	Value
NAME	krykWeather:relF ai
DESC	
ASG	
SCAN	2
PINI	0
PHAS	0
EVNT	0
TSE	0
TSEL	
DTYP	2
DISV	1
DISA	0
SDIS	
DISP	
PROC	
STAT	0
SEVR	0
NSTA	0
NSEV	0
ACKS	3
ACKT	1
DISS	0
LCNT	
PACT	
PUTF	
RPRO	
PRIO	0
TPRO	
UDF	
FLNK	krykWeather:relF ai h
<hr/>	
VAL	49.583
INP	@CAN1:650.1 'L=0,H=10000'
PREC	1
LINR	1
EGUF	100
EQU	0

- Activate by MB3 on graphic device
- Select: Device -> Device Property
- Device Properties ,known' by http (DIXI) server  
No special knowledge programmed into JoiMint
- DIXI server creates JoiMint graphic (as XML file)
- Display of graphic and dynamic updates in JoiMint

# Program Activation

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- As an Application
- From Web Start
  - <http://java.sun.com/products/javawebstart/>
  - (also used to activate cmlog)
  - Read config files from local disk and/or from URL (Web page)

# Plans:

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## Add Data logger graphic capabilities

- Like a waveform display which can display several waveforms taken at different sampling times.  
(i.e. 1000 points take @ 1mSec and 100 points taken @ 100mSec in the same display)

## Add more graphic elements (

## Finish compatibility with dm2k/ medm

## Create JoiMint-KVM based on J2ME for:

- Palm
- Java-KVM aware GSM phones

This development is one reason why we are using String as the base type for data exchange. (KVM does not support floats)